

Claims:

1. An apparatus (10) for passing a mixture of liquids, preferably mixtures of blood and medications, through human
5 and/or animal organs or extremities, having at least one pump device (11) for recirculating the liquids and having at least one mixing unit (14), characterized in that the at least one mixing unit (14) has at least two chamber wheels (17, 18) for metered mixing of the liquids.

10 2. The apparatus (10) of claim 1, characterized in that the mixture ratio of the liquids is adjustable via the diameter ratio and/or the chamber size and/or the rotary speed of the chamber wheels (17, 18).

15 3. The apparatus (10) of claim 1, characterized in that the pressure and the volume flow of the liquids are adjustable.

20 4. The apparatus (10) of claim 1, characterized in that the two chamber wheels (17, 18) are coupled in terms of their drive.

25 5. The apparatus (10) of claim 4, characterized in that the chamber wheels (17, 18) are each supported on two independent shafts and are connected by a gear.

6. The apparatus (10) of claim 4, characterized in that the chamber wheels (17, 18) are supported on a common shaft.

30 7. The apparatus (10) of claim 1, characterized in that the at least one mixing unit (14) and the at least one pump device (11) are combined in a unit.

8. The apparatus (10) of claim 1, characterized in that
the at least one pump (11) is a centrifugal pump.

9. The apparatus (10) of claim 1, characterized in that
5 the at least one pump is pressure- regulated or flow-regulated.

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